

**IN THE UNITED STATES DISTRICT COURT
FOR THE SOUTHERN DISTRICT OF MISSISSIPPI
SOUTHERN DIVISION**

**DIANE HARWOOD, INDIVIDUALLY
AND ON BEHALF OF ALL WRONGFUL
DEATH BENEFICIARIES OF
ROY LINDSAY HARWOOD, DECEASED**

PLAINTIFF

v.

CIVIL ACTION NO. 1:21cv224HSO-JCG

MONSANTO COMPANY

DEFENDANT

**COMPLAINT
(Jury Trial Demanded)**

COMES NOW Diane Harwood, individually and on behalf of all wrongful death beneficiaries of Roy Lindsay Harwood, Deceased, and files this Complaint against Defendant Monsanto Company. In support thereof Plaintiff would show unto the Court the following facts and matters, to wit

PARTIES

1. Plaintiff Diane Harwood ("Plaintiff") is an adult citizen of Hancock County, Mississippi. Plaintiff is the surviving spouse of Roy Lindsay Harwood ("Harwood"), deceased. At the time of his death on December 16, 2020, Harwood was an adult resident citizen of Hancock County, Mississippi, residing at 215 Highpointe Drive, Diamondhead, Mississippi 39525.

2, Defendant Monsanto Company ("Monsanto") is a Delaware corporation with its domicile in the state of Delaware and/or the state of Missouri where Monsanto maintains its principal place of business. Monsanto is admitted to do

business in the state of Mississippi and may be served with the process of this Court by service on its registered agent, Corporation Service Company, 7716 Old Canton Road, Suite C, Madison, Mississippi 39110.

STATUTORY BASIS FOR ACTION

3. This action is brought for personal injuries sustained by Harwood and, pursuant to Miss. Code Ann. §11-7-13 (1972, as amended), for the following persons entitled under the provision of said section to recover for Harwood's wrongful death, being his natural children and surviving spouse.

JURISDICTION

4. This Court has original jurisdiction of this action pursuant to the provisions of 28 USCA § 1332 in that complete diversity of citizenship exists between all plaintiffs and all defendants and the amount in controversy exceeds the sum of Seventy-Five Thousand Dollars (\$75,000.00), exclusive of interest and costs.

5. This court has *in personam* jurisdiction over the Defendant by virtue of the facts that Defendant is admitted to do business in the state of Mississippi and committed a tort, in whole or part, within the state of Mississippi.

VENUE

6. This Court has venue of this action pursuant to the provisions of 28 USC § 1391 in that a substantial part of the events, acts or omissions giving rise to the instant claim, including but not limited to the death of Harwood, occurred or accrued within this Division and District.

UNDERLYING FACTS

A. Introduction

7. At all times relevant to this complaint, Monsanto was the entity that discovered the herbicidal properties of glyphosate and the manufacturer of Roundup®, which contains the active ingredient glyphosate and the surfactant POEA, as well as adjuvants and other "inert" ingredients.

8. Glyphosate is a broad-spectrum, non-selective herbicide used in a wide variety of herbicidal products around the world. Plants treated with glyphosate translocate the systemic herbicide to their roots, shoot regions, and fruit, where it interferes with the plant's ability to form aromatic amino acids necessary for protein synthesis. Treated plants generally die within two to three days. Because plants absorb glyphosate, washing or peeling produce or grain does not entirely remove the chemical.

9. For nearly 40 years, consumers across the world have used Roundup® without knowing of the dangers presented by the product. When Monsanto first introduced Roundup®, it touted glyphosate as a technological breakthrough that could kill almost every weed without causing harm either to people or to the environment. History, however, has proven Monsanto's contention to be untrue. According to the World Health Organization ("WHO"), the main chemical ingredient of Roundup®-glyphosate--is a probable cause of cancer and presents serious health risks to farmers, landscapers and gardeners who are exposed to Roundup®. Monsanto has hidden the truth of the dangers of Roundup®, by championing falsified data,

attacking legitimate studies that reveal Roundup®'s dangers, and waging a prolonged campaign of misinformation to convince government agencies and consumers that Roundup® is safe.

B. The Discovery of Glyphosate and Development of Roundup®

10. The herbicidal properties of glyphosate were discovered in 1970 by Monsanto chemist John Franz. The first glyphosate-based herbicide was introduced to the market in the mid-1970s under the brand name Roundup®. From the outset, Monsanto marketed Roundup® as a "safe" general-purpose herbicide for widespread commercial and consumer use. Despite the evidence that Roundup® is carcinogenic, Monsanto continues to market Roundup® as safe.

11. In addition to its active ingredient glyphosate, Roundup® formulations also contain adjuvants and other chemicals, such as the surfactant known as polyoxyethylene tallow amine ("POEA"), which are considered "inert" and therefore protected as "trade secrets" in manufacturing. Growing evidence suggests that these adjuvants and additional components of Roundup® formulations are not, in fact, inert and are toxic in their own right.

C. Registration of Herbicides under Federal Law

12. The manufacture, formulation, and distribution of herbicides, such as Roundup®, are regulated under the Federal Insecticide, Fungicide, and Rodenticide Act ("FIFRA" or "Act"), 7 U.S.C. § 136 et seq. FIFRA requires that all pesticides be registered with the Environmental Protection Agency ("EPA" or "Agency") prior to their distribution, sale, or use, except as described by the Act. 7 U.S.C. § 136a(a).

13. Because pesticides are toxic to plant and animal life, the EPA's registration process requires a variety of tests to evaluate the potential for exposure to pesticides, the potential for toxicity to people and other non-target organisms, and the potential for causing other adverse effects on the environment. Registration by the EPA, however, is not an assurance or finding of safety; rather, in registering a product the EPA's only determination is that the use of the product in accordance with its label "will not generally cause unreasonable adverse effects on the environment." 7 U.S.C. § 136a(c)(5)(D).

14. FIFRA defines "unreasonable adverse effects on the environment" to mean "any unreasonable risk to man or the environment, taking into account the economic, social, and environmental costs and benefits of the use of any pesticide." 7 U.S.C. § 136(bb). FIFRA thus requires EPA to make a risk/benefit analysis in determining whether a registration should be granted or whether a pesticide is allowed to continue to be sold in commerce.

15. The EPA registered Roundup® for distribution, sale, and manufacture in the United States.

16. FIFRA generally requires that the registrant conduct the health and safety testing of the registrant's pesticide products pursuant to EPA protocols governing the conduct of tests and the laboratory practices that must be followed in conducting the tests. The data produced by the registrant must be submitted to the EPA for review and evaluation. Hence, the evaluation of each pesticide product distributed, sold, or manufactured is completed at the time the product is initially

registered. Governmental entities such as the EPA are not required, nor are they able, to perform the product tests that are required of the manufacturer- registrant.

17. The data necessary for registration of a pesticide has changed over time. The EPA is now in the process of re- evaluating all pesticide products through a Congressionally-mandated process called "re-registration." 7 U.S.C. § 136a-l. In order to reevaluate these pesticides, the EPA is demanding the completion of additional tests and the submission of data for the EPA's review and evaluation.

18. In the case of glyphosate, and therefore Roundup®, the EPA intended to release its preliminary risk assessment in relation to the re-registration process no later than July 2015. The EPA completed its review of glyphosate in early 2015, but the EPA delayed releasing its risk assessment pending further EPA review of the WHO's health-related findings concerning glyphosate. Therefore, the EPA's risk assessment was not publicly released until September 12, 2016.

D. Scientific Fraud underlying the Marketing and Sale of Glyphosate/Roundup®

19. Based on early carcinogenicity studies showing that glyphosate caused cancer in mice and rats, the EPA originally classified glyphosate as possibly carcinogenic to humans (Group C) in 1985. After pressure from Monsanto, including self-commissioned review studies it provided to the EPA, the EPA changed its classification to evidence of non-carcinogenicity in humans (Group E) in 1991. However, the EPA made clear that its revision of the designation in 1991 did not mean that glyphosate does not cause cancer: "It should be emphasized, however, that designation of an agent in Group E is based on the available evidence at the time of

evaluation and should not be interpreted as a definitive conclusion that the agent will not be a carcinogen under any circumstances."

20. On two occasions, the EPA found that the laboratories hired by Monsanto to test the toxicity of its Roundup® products for registration purposes committed fraud.

21. In the first instance, for purposes of seeking initial registration of Roundup® by the EPA, Monsanto hired Industrial Bio-Test Laboratories ("IBT") to perform and evaluate pesticide toxicology studies relating to Roundup®. IBT performed about thirty (30) tests on glyphosate and glyphosate-containing products, including nine of the 15 residue studies needed to register Roundup®.

22. In 1976, the United States Food and Drug Administration ("FDA") performed an inspection of IBT that revealed discrepancies between the raw data and the final report relating to the toxicological impacts of glyphosate. The EPA subsequently audited IBT and found the toxicology studies conducted for the Roundup® herbicide to be invalid. After finding "routine falsification of data" at IBT, an EPA reviewer stated that it was "hard to believe the scientific integrity of the studies when they said they took specimens of the uterus from male rabbits." Three top IBT executives were convicted of fraud in 1983.

23. In the second incident of data falsification, Monsanto hired Craven Laboratories in 1991 to perform pesticide and herbicide studies, including studies for Roundup®. In that same year, the owner of Craven Laboratories and three of its

employees were indicted and convicted of fraudulent laboratory practices in the testing of pesticides and herbicides.

24. Despite the falsity of the tests that underlay the registration of Roundup®, Monsanto was, within a few years of its launch, marketing and selling Roundup® in 115 countries.

E. Roundup® is Key to Monsanto's Market Dominance

25. The success of Roundup® was key to Monsanto's continued reputation and dominance in the marketplace. Largely due to sales of Roundup®, Monsanto's agriculture division out-performed its chemical division's operating income, and that gap increased yearly. But with its patent for glyphosate expiring in the United States in the year 2000, Monsanto needed a strategy to maintain the market dominance of Roundup® and to ward off impending competition.

26. In response, Monsanto began the development and sale of genetically engineered Monsanto Ready® seeds in 1996. Since Monsanto Ready® crops are resistant to glyphosate, farmers can spray Roundup® onto their fields during the growing season without harming the crop. This allowed Monsanto to further expand the market for Roundup®; by 2000, Monsanto's biotechnology seeds were planted on more than 80 million acres worldwide and nearly 70% of American soybeans were planted from Monsanto Ready® seeds. It also secured Monsanto's dominant share of the glyphosate market through a marketing strategy that coupled proprietary Monsanto Ready® seeds with continued sales of its Roundup® herbicide.

27. Through a three-pronged strategy of increasing production, decreasing prices, and by coupling Roundup® with Monsanto Ready® seeds, Roundup® became Monsanto's most profitable product. In 2000, Roundup® accounted for almost \$2.8 billion in sales, out-selling other herbicides by a margin of five to one, and accounted for close to one-half of Monsanto's revenue. Due to Monsanto's efforts which perpetuated the use of Roundup®, glyphosate remains one of the world's most used herbicides by sales volume.

F. Monsanto's False Advertising of the Safety of Roundup®

28. In 1996, the New York Attorney General ("NYAG") filed a lawsuit against Monsanto based on its false and misleading advertising of Roundup® products. Specifically, the lawsuit challenged Monsanto's representations that its spray-on glyphosate-based herbicides, including Roundup®, were "safer than table salt" and "practically non-toxic" to mammals, birds, and fish. The NYAG found that the following representations about the human and environmental safety of glyphosate and/or Roundup® were deceptive and misleading:

- a) "Remember that environmentally friendly Monsanto herbicide is biodegradable. It won't build up in the soil so you can use Monsanto with confidence along customers' driveways, sidewalks and fences ..."
- b) "And remember that Monsanto is biodegradable and won't build up in the soil. That will give you the environmental confidence you need to use Monsanto everywhere you've got a weed, brush, edging or trimming problem."
- c) "Monsanto biodegrades into naturally occurring elements."
- d) "Remember that versatile Monsanto herbicide stays where you put it. That means there's no washing or leaching to harm customers' shrubs or other desirable vegetation."

- e) "This non-residual herbicide will not wash or leach in the soil. It ... stays where you apply it."
- f) "Glyphosate is less toxic to rats than table salt following acute oral ingestion."
- g) "Glyphosate's safety margin is much greater than required. It has over a 1,000- fold safety margin in food and over a 700-fold safety margin for workers who manufacture it or use it."
- h) "You can feel good about using herbicides by Monsanto. They carry a toxicity category rating of 'practically non-toxic' as it pertains to mammals, birds and fish."
- i) "Monsanto can be used where kids and pets will play and breaks down into natural material." This ad depicts a person with his head in the ground and a pet dog standing in an area which has been treated with Monsanto.

29. On November 19, 1996, Monsanto entered into an Assurance of Discontinuance with NYAG, in which Monsanto agreed, among other things, "to cease and desist from publishing or broadcasting any advertisements [in New York] that represent, directly or by implication" that:

- a) its glyphosate-containing pesticide products or any component thereof are safe, non-toxic, harmless or free from risk.
- b) its glyphosate-containing pesticide products or any component thereof manufactured, formulated, distributed or sold by Monsanto are biodegradable
- c) its glyphosate-containing pesticide products or any component thereof stay where they are applied under all circumstances and will not move through the environment by any means.
- d) its glyphosate-containing pesticide products or any component thereof are "good" for the environment or are "known for their environmental characteristics."

- e) glyphosate-containing pesticide products or any component thereof are safer or less toxic than common consumer products other than herbicides.
- f) its glyphosate-containing products or any component thereof might be classified as "practically non-toxic."

30. Monsanto did not alter, and has not altered, its advertising of Roundup® in the same manner in any state other than New York.

31. In 2009, France's highest court ruled that Monsanto had not told the truth about the safety of Roundup®. The French court affirmed an earlier judgment that Monsanto had falsely advertised its herbicide Roundup® as "biodegradable" and that it "left the soil clean."

G. Classifications and Assessments of Glyphosate

32. The International Agency for Research on Cancer ("IARC"), which is part of the World Health Organization, has classified glyphosate as a probable human carcinogen. The IARC process for the classification of glyphosate followed IARC's stringent procedures for the evaluation of a chemical agent.

33. The IARC Monograph program has reviewed 980 agents. Of those reviewed, it has determined 116 agents to be Group 1 (Known Human Carcinogens); 73 agents to be Group 2A (Probable Human Carcinogens); 287 agents to be Group 2B (Possible Human Carcinogens); 503 agents to be Group 3 (Not Classified); and one agent to be Probably Not Carcinogenic.

34. The established procedure for IARC Monograph evaluations is described in the IARC Preamble. Evaluations are performed by panels of international experts,

selected on the basis of their expertise and the absence of actual or apparent conflicts of interest.

35. IARC Monograph meetings are announced one year in advance, with a call for the submission of data and the attendance of experts. Eight months before the Monograph meeting, the IARC selects the members of the Working Group which, in turn, develops the sections of the Monograph. The call for relevant data is closed at one month prior to the Monograph meeting, and various draft sections of the Monograph are distributed among Working Group members for review and comment. Finally, at the Monograph meeting, the Working Group finalizes review of all literature, evaluates the evidence in each category, and completes the overall evaluation. Within two weeks after the Monograph meeting, the summary of the Working Group findings are published in *The Lancet Oncology*, and within a year after the meeting, the finalized Monograph is published.

36. In assessing a chemical agent, the IARC Working Group reviews the following information: (a) human, experimental, and mechanistic data; (b) all pertinent epidemiological studies and cancer bioassays; and (c) representative mechanistic data. The studies must be publicly available and have sufficient detail for meaningful review, and reviewers cannot be associated with the underlying study.

37. In March 2015, the IARC reassessed glyphosate, following its customary but exacting procedures. The summary published in *The Lancet Oncology* reported the IARC's conclusion that glyphosate is a Group 2A agent and probably carcinogenic in humans.

38. On July 29, 2015, the IARC issued its Monograph for glyphosate - Monograph Volume 112 - which reflects that a Working Group of 17 experts from 11 countries met at IARC from March 3-10, 2015 to assess the carcinogenicity of certain herbicides, including glyphosate. The March meeting culminated a nearly one-year review and preparation by the IARC Secretariat and the Working Group, including a comprehensive review of the latest available scientific evidence. According to published procedures, the Working Group considered "reports that have been published or accepted for publication in the openly available scientific literature" as well as "data from governmental reports that are publicly available."

39. The IARC study considered the following exposure groups: (a) occupational exposure of farmers and tree nursery workers in the United States, forestry workers in Canada and Finland and municipal weed-control workers in the United Kingdom; and (b) para- occupational exposure in farming families.

40. The IARC Monograph identified glyphosate as the second-most used household herbicide in the United States for weed control between 2001 and 2007 and the most heavily used herbicide in the world in 2012.

41. The IARC Monograph identified glyphosate exposure pathways as air (especially during spraying), water, and food. Community exposure to glyphosate was found to be widespread with glyphosate in soil, air, surface water, and groundwater, as well as in food.

42. The assessment of the IARC Working Group identified several case-control studies of occupational exposure in the United States, Canada, and Sweden.

These studies show a human health concern from agricultural and other work-related exposure to glyphosate.

43. The IARC Working Group found an increased risk between exposure to glyphosate and non-Hodgkin Lymphoma ("NHL"), including subtypes of NHL, and the increased risk persisted after adjustment for other pesticides.

44. The IARC Working Group also found that glyphosate caused DNA and chromosomal damage in human cells. One study in community residents reported increases in blood markers of chromosomal damage (micronuclei) after glyphosate formulations were sprayed. The IARC Working Group also noted that glyphosate has been detected in the urine of agricultural workers, indicating absorption. Soil microbes degrade glyphosate to aminomethylphosphoric acid (AMPA). Blood AMPA detection after exposure suggests intestinal microbial metabolism in humans.

45. The IARC Working Group further found that glyphosate and glyphosate formulations induced DNA and chromosomal damage in mammals, and in human and animal cells in utero.

46. The IARC Working Group also noted genotoxic, hormonal, and enzymatic effects in mammals exposed to glyphosate. Essentially, glyphosate inhibits the biosynthesis of aromatic amino acids, which leads to several metabolic disturbances, including the inhibition of protein and secondary product biosynthesis and general metabolic disruption.

47. The IARC Working Group also reviewed an Agricultural Health Study, consisting of a prospective cohort of 57,311 licensed pesticide applicators in Iowa and

North Carolina. While this study differed from others in that it was based on a self-administered questionnaire, the results support an association between glyphosate exposure and multiple myeloma, hairy cell leukemia ("HCL"), and chronic lymphocytic leukemia ("CLL"), in addition to several other cancers.

H. Earlier Findings about Glyphosate's Dangers to Human Health

48. The EPA has a technical fact sheet, as part of its Drinking Water and Health, National Primary Drinking Water Regulations publication, relating to glyphosate. This technical fact sheet predates IARC's March 20, 2015 evaluation. The fact sheet describes the release patterns for glyphosate as follows:

Release Patterns

Glyphosate is released to the environment in its use as a herbicide for controlling woody and herbaceous weeds on forestry, right-of-way, cropped and non-cropped sites. These sites may be around water and in wetlands.

It may also be released to the environment during its manufacture, formulation, transport, storage, disposal and cleanup, and from spills. Since glyphosate is not a listed chemical in the Toxics Release Inventory, data on releases during its manufacture and handling are not available.

Occupational workers and home gardeners may be exposed to glyphosate by inhalation and dermal contact during spraying, mixing, and cleanup. They may also be exposed by touching soil and plants to which glyphosate was applied. Occupational exposure may also occur during glyphosate's manufacture, transport storage, and disposal.

49. In 1995, the Northwest Coalition for Alternatives to Pesticides reported that in California, the state with the most comprehensive program for reporting of pesticide-caused illness, glyphosate was the third most commonly-reported cause of pesticide illness among agricultural workers.

I. The Toxicity of Other Ingredients in Roundup®

50. In addition to the toxicity of the active ingredient, glyphosate, several studies support the hypothesis that the glyphosate-based formulation in Monsanto's Roundup® products is more dangerous and toxic than glyphosate alone. Indeed, as early as 1991, available evidence demonstrated that glyphosate formulations were significantly more toxic than glyphosate alone.

51. In 2002, a study by Julie Marc, entitled "Pesticide Monsanto Provokes Cell Division Dysfunction at the Level of CDK1/Cyclin B Activation," revealed that Roundup® causes delays in the cell cycles of sea urchins but that the same concentrations of glyphosate alone were ineffective and did not alter cell cycles.

52. A 2004 study by Marc and others, entitled "Glyphosate-based pesticides affect cell cycle regulation," demonstrated a molecular link between glyphosate-based products and cell cycle dysregulation. The researchers noted that "cell-cycle dysregulation is a hallmark of tumor cells and human cancer. Failure in the cell-cycle checkpoints leads genomic instability and subsequent development of cancers from the initial affected cell." Further, "[s]ince cell cycle disorders such as cancer result from dysfunction of a unique cell, it was of interest to evaluate the threshold dose of glyphosate affecting the cells."

53. In 2005, a study by Francisco Peixoto, entitled "Comparative effects of the Monsanto and glyphosate on mitochondrial oxidative phosphorylation," demonstrated that Roundup®'s effects on rat liver mitochondria are far more toxic than equal concentrations of glyphosate alone. The Peixoto study further suggested

that the harmful effects of Roundup® on mitochondrial bioenergetics could not be exclusively attributed to glyphosate but could be the result of other chemicals, such as the surfactant POEA, or in the alternative, due to a potential synergic effect between glyphosate and other ingredients in the Roundup® formulation.

54. In 2009, Nora Benachour and Gilles-Eric Seralini published a study examining the effects of Roundup® and glyphosate on human umbilical, embryonic, and placental cells. The study tested dilution levels of Roundup® and glyphosate that were far below agricultural recommendations, corresponding with low levels of residue in food. The researchers ultimately concluded that supposed "inert" ingredients, and possibly POEA, alter human cell permeability and amplify toxicity of glyphosate alone. The researchers further suggested that assessments of glyphosate toxicity should account for the presence of adjuvants or additional chemicals used in the formulation of the complete pesticide. The study confirmed that the adjuvants present in Roundup® are not, in fact, inert and that Roundup® is potentially far more toxic than its active ingredient glyphosate alone.

55. The results of these studies were at all times available to Monsanto. Monsanto thus knew or should have known that Roundup® is more toxic than glyphosate alone and that safety studies of Roundup®, Monsanto's adjuvants and "inert" ingredients, and/or the surfactant POEA were necessary to protect Plaintiff from Roundup®. Despite its knowledge that Roundup® is considerably more dangerous than glyphosate alone, Monsanto continued to promote Roundup® as safe.

J. Recent Worldwide Bans on Roundup®/Glyphosate

56. Several countries around the world have instituted bans on the sale of Roundup® and other glyphosate-containing herbicides, both before and since IARC first announced its assessment for glyphosate in March 2015, and more countries undoubtedly will follow suit as the dangers of the use of Roundup® become more widely known. The Netherlands issued a ban on all glyphosate-based herbicides, including Roundup®, which took effect by the end of 2015. In issuing the ban, the Dutch Parliament member who introduced the successful legislation stated: "Agricultural pesticides in user-friendly packaging are sold in abundance to private persons. In garden centers, Roundup® is promoted as harmless, but unsuspecting customers have no idea what the risks of this product are. Especially children are sensitive to toxic substances and should therefore not be exposed to it."

57. The Brazilian Public Prosecutor in the Federal District requested that the Brazilian Justice Department suspend the use of glyphosate.

58. France banned the private sale of Roundup® and glyphosate following the IARC assessment for Glyphosate.

59. Bermuda banned both the private and commercial sale of glyphosates, including Roundup®. The Bermuda government explained its ban as follows: "Following a recent scientific study carried out by a leading cancer agency, the importation of weed spray 'Monsanto' has been suspended."

60. The Sri Lankan government banned the private and commercial use of glyphosate, particularly out of concern that glyphosate has been linked to fatal kidney disease in agricultural workers.

61. The government of Colombia announced its ban on using Roundup® and glyphosate to destroy illegal plantations of coca, the raw ingredient for cocaine, because of the WHO's finding that glyphosate is probably carcinogenic.

K. Listing under California Proposition

62. On September 4, 2015, California's Office of Environmental Health Hazard Assessment ("OEHHA") published a notice of intent to include glyphosate on the state's list of known carcinogens under Proposition 65 (informally known as "Proposition 65"). California's Safe Drinking Water and Toxic Enforcement Act of 1986 requires the state to maintain and, at least once a year, revise and republish a list of chemicals "known to the State of California to cause cancer or reproductive toxicity." The OEHHA determined that glyphosate met the criteria for the listing mechanism under the Labor Code following IARC's assessment of the chemical.

63. The listing process under the Labor Code is essentially automatic. The list of known carcinogens, at a minimum, must include substances identified by reference in Labor Code § 6382(b)(1). That section of the Labor Code identifies "[s]ubstances listed as human or animal carcinogens by the International Agency for Research on Cancer (IARC)." IARC's classification of glyphosate as a Group 2A chemical ("probably carcinogenic to humans") therefore triggered the listing.

64. A business that deploys a listed chemical in its products must provide "clear and reasonable warnings" to the public prior to exposure to the chemical. To be clear and reasonable, a warning must "(1) clearly communicate that the chemical is known to cause cancer, and/or birth defects or other reproductive harm; and (2) effectively reach the person before exposure." The law also prohibits the discharge of listed chemicals into drinking water.

65. Monsanto disputed the listing decision and, in January 2016, filed a lawsuit against OEHHA and the agency's acting director, Lauren Zeise, in California state court, seeking declaratory and injunctive relief to prevent OEHHA from listing glyphosate.

66. Monsanto alleged that OEHHA's exclusive reliance on the IARC decision signified that "OEHHA effectively elevated the determination of an ad hoc committee of an unelected, foreign body, which answers to no United States official (let alone any California state official), over the conclusions of its own scientific experts." Monsanto further alleged that the Labor Code listing mechanism presented various constitutional violations because it "effectively empowers an unelected, undemocratic, unaccountable, and foreign body to make laws applicable in California." Among other things, Monsanto argued that Proposition 65's requirement to provide a "clear and reasonable warning" to consumers that the chemical is a known carcinogen would damage its reputation and violate its First Amendment rights.

67. On March 28, 2017 OEHHA posted Notice on its website that glyphosate would be added to the list of chemicals known to the state of California to cause cancer for purposes of Proposition 65.

L. Statement of Concern regarding Glyphosate-Based Herbicides

68. On February 17, 2016, a consensus statement published in the journal *Environmental Health*, entitled "Concerns over use of glyphosate-based herbicides and risks associated with exposures: a consensus statement," assessed the safety of glyphosate-based herbicides (GBHs). The paper's "focus is on the unanticipated effects arising from the worldwide increase in use of GBHs, coupled with recent discoveries about the toxicity and human health risks stemming from use of GBHs."

The researchers drew seven factual conclusions about GBHs:

- a) GBHs are the most heavily applied herbicide in the world and usage continues to rise;
- b) Worldwide, GBHs often contaminate drinking water sources, precipitation, and air, especially in agricultural regions;
- c) The half-life of glyphosate in water and soil is longer than previously recognized;
- d) Glyphosate and its metabolites are widely present in the global soybean supply;
- e) Human exposures to GBHs are rising;
- f) Glyphosate is now authoritatively classified as a probable human carcinogen; and
- g) Regulatory estimates of tolerable daily intakes for glyphosate in the United States and European Union are based on outdated science.

69. The researchers noted that GBH use has increased approximately 100-fold since the 1970s. Further, far from posing a limited hazard to vertebrates, as previously believed, two decades of evidence demonstrated that "several vertebrate pathways are likely targets of action, including hepatorenal damage, effects on nutrient balance through glyphosate chelating action and endocrine disruption."

70. The paper attributes uncertainties in current assessments of glyphosate formulations to the fact that "[t]he full list of chemicals in most commercial GBHs is protected as 'commercial business information,' despite the universally accepted relevance of such information to scientists hoping to conduct an accurate risk assessment of these herbicide formulations." Further, the researchers argue, "[t]he distinction in regulatory review and decision processes between 'active' and 'inert' ingredients has no toxicological justification, given increasing evidence that several so-called 'inert' adjuvants are toxic in their own right."

71. Among various implications, the researchers conclude that "existing toxicological data and risk assessments are not sufficient to infer that GBHs, as currently used, are safe." Further, "GBH-product formulations are more potent, or toxic, than glyphosate alone to a wide array of non-target organisms including mammals, aquatic insects, and fish." Accordingly, "risk assessments of GBHs that are based on studies quantifying the impacts of glyphosate alone underestimate both toxicity and exposure, and thus risk." The paper concludes that this "shortcoming has repeatedly led regulators to set inappropriately high exposure thresholds."

72. The researchers also critique the current practice of regulators who largely rely on "unpublished, non-peer reviewed data generated by the registrants" but ignore "published research because it often uses standards and procedures to assess quality that are different from those codified in regulatory agency data requirements, which largely focus on avoiding fraud." In the researchers' view, "[s]cientists independent of the registrants should conduct regulatory tests of GBHs that include glyphosate alone, as well as GBH-product formulations."

73. The researchers also call for greater inclusion of GBHs in government-led toxicology testing programs:

[A] fresh and independent examination of GBH toxicity should be undertaken, and ... this re-examination be accompanied by systematic efforts by relevant agencies to monitor GBH levels in people and in the food supply, none of which are occurring today. The U.S. National Toxicology Program should prioritize a thorough toxicological assessment of the multiple pathways now identified as potentially vulnerable to GBHs.

74. The researchers suggest that, in order to fill the gap created by an absence of government funds to support research on GBHs, regulators could adopt a system through which manufacturers fund the registration process and the necessary testing:

[W]e recommend that a system be put in place through which manufacturers of GBHs provide funds to the appropriate regulatory body as part of routine registration actions and fees. Such funds should then be transferred to appropriate government research institutes, or to an agency experienced in the award of competitive grants. In either case, funds would be made available to independent scientists to conduct the appropriate long-term (minimum 2 years) safety studies in recognized animal model systems. A thorough and modern assessment of GBH toxicity will encompass potential endocrine disruption, impacts on the

gut microbiome, carcinogenicity, and multigenerational effects looking at reproductive capability and frequency of birth defects."

ROY LINDSAY HARWOOD'S EXPOSURE TO ROUNDUP®

75. At the time of his death on December 16, 2020, Harwood was 72 years of age. Harwood was a retired firefighter.

76. Harwood was exposed to Roundup® while working around his home and on his farm. At the times of his exposure to Roundup®, Harwood was unaware of the dangers presented by such product, and he did not wear any breathing protection or any dermal protection, other than occasional gloves, when spraying and using Roundup®.

77. In or around December, 2019, Harwood was diagnosed with non-hodgkin's lymphoma, and over the course of the following year he developed acute symptoms. Harwood incurred substantial medical expenses and experienced extreme pain and suffering as a result of his condition and the medical treatment he underwent in response to the same.

78. Harwood succumbed to his illness and died on December 16, 2020, as a direct and proximate result of his exposure to Roundup®.

DUTIES AND BREACHES

COUNT I CLAIM AGAINST MONSANTO FOR FAILURE TO WARN

79. At all times pertinent hereto, Monsanto was the manufacturer, designer and seller of the product known as Roundup®.

80. At the time that the Roundup® products purchased and used by Harwood left Monsanto's control, such Roundup® products were defective because they failed to contain adequate warnings or instructions, including but not limited to, adequate warnings concerning the carcinogenic characteristics of such products and adequate instructions to the user or consumer to utilize breathing protection, dermal protection, or employ other methods to protect the user or consumer from the dangers arising from exposure to such products.

81. Monsanto's failure to adequately warn regarding the use of Roundup® rendered the product unreasonably dangerous to users or consumers, including Harwood, and proximately caused the harm which Harwood sustained and the damages arising therefrom.

82. At the time the Roundup® products which Harwood used left Monsanto's control, Monsanto knew, or in light of reasonably available knowledge should have known, about the danger that caused the harm, injuries and damages for which recovery is sought herein.

83. Monsanto knew, or should have known, that ordinary users or consumers, including Harwood, would not realize and appreciate the dangerous condition of the Roundup® products. Harwood (a) had no knowledge of a condition of the Roundup® product that was inconsistent with his safety, (b) did not appreciate any danger in the condition of the Roundup® product, and (c) did not deliberately and voluntarily choose to expose himself to the danger of the Roundup® product in such a manner as to register assent to continuance of its dangerous condition. Further, the

danger posed by the Roundup® product was not known and was not open and obvious to Harwood, given the ordinary knowledge of persons in the position of Harwood who ordinarily used the Roundup® product.

84. Monsanto's failure to warn of the risks relating to the use of Roundup® proximately caused Harwood to contract the disease of mantle cell lymphoma which resulted in Harwood ' s untimely demise.

COUNT II

CLAIM AGAINST MONSANTO FOR DEFECTIVE DESIGN OR FORMULATION

85. At all times pertinent hereto, Monsanto was the manufacturer, designer and seller of the product known as Roundup®.

86. At the time the Roundup® products used by Harwood left Monsanto's control, such products were designed or formulated in a defective manner which rendered such products unreasonably dangerous to the user or consumer, including Harwood, and such defective and unreasonably dangerous condition of such products proximately caused the harm, injuries, and damages for which recovery is sought herein.

87. The harm, injuries and damages, including the wrongful death of Harwood, for which recovery is sought herein were not caused by an inherent characteristic or generic aspect of the Roundup® product that could not be eliminated without substantially compromising the product's usefulness or desirability, or by an inherent characteristic or generic aspect of the product which was known or

recognized by Harwood as an ordinary user of the product with ordinary and common knowledge concerning the product.

88. Monsanto knew, or should have known, that ordinary users or consumers, including Harwood, would not realize and appreciate the dangerous condition of the Roundup® products. Harwood (a) had no knowledge of a condition of the Roundup® product that was inconsistent with her safety, (b) did not appreciate any danger in the condition of the Roundup® product, and (c) did not deliberately and voluntarily choose to expose herself to the danger of the Roundup® product in such a manner as to register assent to continuance of its dangerous condition. Further, the danger posed by the Roundup® product was not known and was not open and obvious to Harwood, given the ordinary knowledge of persons in the position of Harwood who ordinarily used the Roundup® product.

89. At the time the Roundup® products used by Harwood left Monsanto's control, Monsanto knew, or in light of reasonable available knowledge or the exercise of reasonable care should have known, about the danger presented by the Roundup® product which caused the harm, injuries and damages for which recovery is sought herein.

90. At the time the Roundup® products used by Harwood left Monsanto's control, the product failed to function as expected, and there existed a feasible design alternative that would have to a reasonable probability have prevented the harm, injuries and damages sought herein without impairing the utility, usefulness,

practicality or desirability of the Roundup® product to users or consumers, including Harwood.

91. Monsanto's design, manufacture and sale of a defective and unreasonably dangerous Roundup® product proximately caused Harwood to contract the disease of mantle cell lymphoma which resulted in Harwood's untimely demise.

COUNT III

CLAIM AGAINST MONSANTO FOR BREACH OF EXPRESS WARRANTY OR EXPRESS FACTUAL REPRESENTATION

92. At all times pertinent hereto, Monsanto was the manufacturer, designer and seller of the product known as Roundup®.

93. At all times pertinent hereto, Monsanto expressly warranted or represented that its Roundup® product was a safe general-purpose herbicide that was "safer than table salt;" that carried a toxicity category rating of "practically non-toxic" to mammals, birds and fish; that had a 1,000-fold safety margin in food; and that had a 700-fold safety margin for workers who use Roundup®. Such deceptive and misleading warranties and factual representations instilled a false sense of safety and security in users and consumers, including Harwood, who relied thereon by purchasing and using Roundup® products for gardening, lawn care and other domestic purposes. Harwood's reliance on such false warranties and factual representations by Monsanto exposed her to the dangers of the Roundup® product, including the carcinogenic characteristics of such product.

94. Such false warranties and factual representations by Monsanto regarding the Roundup® product constituted a defective condition of the product

which rendered it unreasonably dangerous to users and consumers, including Harwood. Such defective and unreasonably dangerous condition of the Roundup® product proximately caused the harm, injuries and damages for which recovery is sought herein.

95. Monsanto's false express warranty and false factual representations concerning the Roundup® product proximately caused Harwood to contract the disease of mantle cell lymphoma which resulted in Harwood's untimely demise.

COUNT IV

CLAIM AGAINST MONSANTO FOR BREACH OF IMPLIED WARRANTIES

96. At all times pertinent hereto, (a) Monsanto was a merchant of goods of the kind, including the Roundup® products, which were sold to Harwood; (b) the Roundup® products purchased by Harwood were not merchantable at the time of their sale due to the carcinogenic characteristics of such products; (c) the defective nature of the Roundup® products sold to Harwood caused her to sustain harm and injuries and proximately resulted in Harwood's death; and (d) Monsanto had notice and knowledge of the harm, injuries and damages which were proximately caused by its Roundup® product. Monsanto breached the implied warranty of merchantability inherent in the sale of the Roundup® products to Harwood and is, therefore, responsible for all harm, injuries and damages which arise therefrom, including all damages complained of herein.

97. At all times pertinent hereto, (a) Monsanto had actual or constructive knowledge of the particular purposes for which Harwood purchased the Roundup®

products; (b) Harwood relied on the skill, judgment and scientific knowledge of Monsanto to provide a herbicide which was suitable and safe for the particular purposes for which Harwood used the Roundup® products; and (c) the Roundup® products which Monsanto supplied to Harwood were unfit for the particular purposes for which Harwood utilized the same. Monsanto breached the implied warranty of fitness for a particular purpose with regard to the sale of Roundup® products to Harwood and is, therefore, responsible for all harm, injuries and damages which arise therefrom, including all damages complained of herein.

DAMAGES

98. Plaintiff, on behalf of all wrongful death beneficiaries of Roy Lindsay Harwood, seeks recovery of the following damages sustained by him and by all wrongful death beneficiaries caused by the defective and unreasonably dangerous condition of the Roundup® products designed, manufactured and sold by Monsanto.

I

DAMAGES WHICH THE DECEDENT COULD HAVE RECOVERED

99. Plaintiff, in the aforesaid capacities, is entitled to recover and hereby seeks from Monsanto all of the following damages which the decedent, Charles Neal Hill, could have recovered in the event he had survived:

a) Damages for the value of the impairment and/or destruction of the quality of Harwood's life;

b) Damages for all pain, suffering and mental anguish which Harwood experienced from the date that she was diagnosed with mantle cell lymphoma up to the time of Harwood's ultimate demise;

c) Damages for all burial and interment costs;

d) Damages for the present value of the impairment of Harwood's future earning capacity, if any; and

e) Damages for all reasonable and necessary medical expenses incurred by Harwood.

II

DAMAGES SUSTAINED BY THE SURVIVORS OF DECEDENT

100. Plaintiff, Individually and on behalf of all wrongful death beneficiaries of Roy Lindsay Harwood, Deceased seeks all damages recoverable under Mississippi law due to the death of Harwood, including damages for his losses of love, consortium, society, companionship, services, contributions, support, and care for the balance of Charles Neal Hill's natural life expectancy.

III

PUNITIVE DAMAGES AND ATTORNEY'S FEES

101. In the event of proof of malicious or willful, grossly negligent, or reckless conduct on the part of or attributable to Monsanto, Plaintiff is entitled to an award of punitive damages against Monsanto to punish it for such conduct and to deter Monsanto and others similarly situated from like conduct in the future.

I02. In the event of an award of punitive damages in this action, Plaintiff is entitled to an award of all reasonable attorney' s fees incurred in the prosecution of this action.

ADDAMNUM

WHEREFORE PREMISES CONSIDERED, Plaintiff Diane Harwood, individually and on behalf of all wrongful death beneficiaries of Roy Lindsay Harwood, Deceased, brings this action against the Defendant, Monsanto Company, and demands judgment of and from Monsanto Company for all compensatory damages, punitive damages and attorney's fees alleged hereinabove, in an amount in excess of Seventy-Five Thousand Dollars (\$75,000) exclusive of interest and costs, and for all costs of this action to be assessed.

JURY TRIAL DEMAND

Plaintiff hereby demands trial by jury on all issues of fact presented in this action.

RESPECTFULLY SUBMITTED this the 29th day of June, 2021.

**DIANE HARWOOD, INDIVIDUALLY
AND ON BEHALF OF ALL
WRONGFUL DEATH
BENEFICIARIES OF ROY LINDSAY
HARWOOD, DECEASED**

By: /s/ W. Thomas McCraney, III
W. Thomas McCraney, III
Attorney for Plaintiff

OF COUNSEL:

W. Thomas McCraney, III (MS Bar No. 10171)
McCraney | Montagnet | Quin | Noble, PLLC
602 Steed Road • Suite 200
Ridgeland, Mississippi 39157
Telephone: (601) 707-5725
Facsimile: (601) 510-2939
Email: tmccraney@mmqnlaw.com